

**Work Order ID 108036****\*108036\***

Page 1

October-07-13 9:07:04 AM

Item ID: 646.3719

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Doubler

Start Date: 10/21/13 Start Qty: 4.00

**\*4\***

Cust Item ID:

Required Date: 10/21/13 Req'd Qty: 4.00

**\*4\***

Customer:

Reference:

Approvals: Process Plan: MLJDate: 13-10-08 Tooling:

Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_

Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
646.3700	A

0.00

**\*110\***

Waterjet

FLOW CNC Waterjet

Memo

1-Cut as per Dwg

Dwg Rev: AProg Rev: A

2-Deburr if necessary

0.00

40Ac14-02-19

110

QC2- Inspect parts off machine FAI/FAIB

0.00

**\*120\***

QC

Quality Control

Memo

0.00

40Ac14-02-19

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

**FAULT CATEGORY**

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other

# Work Order ID 108036

\*108036\*

Page 2

October-07-13 9:07:04 AM

Item ID: 646.3719

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Doubler

Start Date: 10/21/13 Start Qty: 4.00

\*4\*

Cust Item ID:

Required Date: 10/21/13 Req'd Qty: 4.00

\*4\*

Customer:

Reference:

Run Start \*NR1\*

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop \*NR2\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* QC Quality Control	QC8- Inspect parts - second check  Memo	0.00 0.00				4			
140 *140* Outsource4 Outsource process - Anodize	Outsource process-Anodize per QSI017 4.1.10.1  Memo Issue P/O to ATG : <u>Q3102</u>  1- Black Anodize as per Dwg 646.3700 2- PRIME AS PER DWG, SEE NOTE #2  Certification of Conformity is required	0.00 0.00				4			02/11/02/21
150 *150* Packaging Packaging	Receive & Inspect for Damage & Mat'l Certs  Memo	0.00 0.00							12/13/14

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width:100%; font-size: small;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>						Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>																								
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Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																									
<b>Root Cause</b>	<b>Date</b>	<b>Step</b>	<b>Qty</b>	<b>Description of work order update or Non-conformance</b>	<b>Initial Chief Eng</b>	<b>Action Description</b>	<b>Sign &amp; Date</b>	<b>Verification</b>	<b>QC Inspector</b>																		
Doc/Data <input type="checkbox"/>																											
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Supplier <input type="checkbox"/>																											
Training <input type="checkbox"/>																											
Unapproved <input type="checkbox"/>																											

FAULT CATEGORY											
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other

# Work Order ID 108036

October-07-13 9:07:04 AM

\*108036\*

Page 3

Item ID: 646.3719

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Doubler

Start Date: 10/21/13 Start Qty: 4.00

\*4\*

Cust Item ID:

Required Date: 10/21/13 Req'd Qty: 4.00

\*4\*

Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date:

Run Start \*NR1\*

QC: Date: SPC (Y/N): Date:

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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160

QC5- Inspect part completeness to step on W/O

0.00

\*160\*

QC

Memo

0.00

Quality Control

190

Identify as per dwg & Stock Location: 8524 0.00

\*190\*

Packaging

Memo

0.00

Packaging

\*\*\*IDENTIFY AS PER APICAL MPP-120 BY STAMPING THE P# AND REV\*\*\*

200

QC21- Final Inspection - Work Order Release 0.00

\*200\*

QC

Memo

0.00

Quality Control

48

14-3-11

DAS  
26  
9-89

MCJ 14-03-11

MCJ 14-03-11

NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
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Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other
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# Picklist Print

October-07-13 9:07:04 AM

Page 1

Work Order ID: 108036

Parent Item: 646.3719

Parent Item Name: Doubler

Start Date: 10/21/13

Required Date: 10/21/13

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP REV:A 12.10.22 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6S.063 6061-T6 .063 Sheet		Purchased	No			110	sf	627.7905	0.02778	<del>0.1169684</del>		Ac 14-02-19	

Location

MAT021

123135

124003

M126075

M127006

Loc Qty

627.7905

120.2625

72.113

99.415

336

Loc Code

m128054 → .12

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>					
<b>Root Cause</b>	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											
<b>FAULT CATEGORY</b>											
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other		





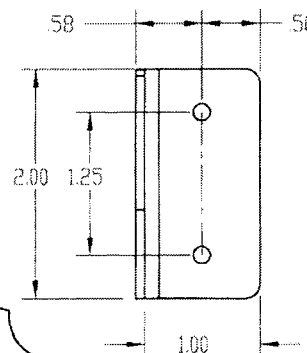
APICAL INDUSTRIES, INC.	ENGINEERING CHANGE NOTICE NO. 03702				SHEET 1 OF 2	
	DWG NO. 646.3700	REV: A	PREPARED BY B. PETERS	DATE: 11/15/12	EFFECT ON DWG <input type="checkbox"/> INC. <input checked="" type="checkbox"/> UNINC.	
	DWG TITLE: SHEETMETAL					
	APPROVED BY: ENGR <i>[Signature]</i>	MFG <i>[Signature]</i>	QC <i>[Signature]</i>	EFF: NEXT ORDER		
TRANSACTION CODES (TC) A-ADD C-CREATE R-REVISE D-DELETE	REASON: ADDED ALTERNATE MATERIAL AND REVISED REFERENCE DIMENSIONS				ECR: D-12-010	

## SHEET 1, ZONE A2 IS:

IS

⚠ PRIMARY MATERIAL: ALUMINUM 6061-T6 PER AMS-QQ-A-250/11  
ALTERNATE MATERIAL: SS 17-4 PH PER AMS 5604

IS



## SHEET 7, ZONE B1 IS:

108036 MJS  
13-10-08

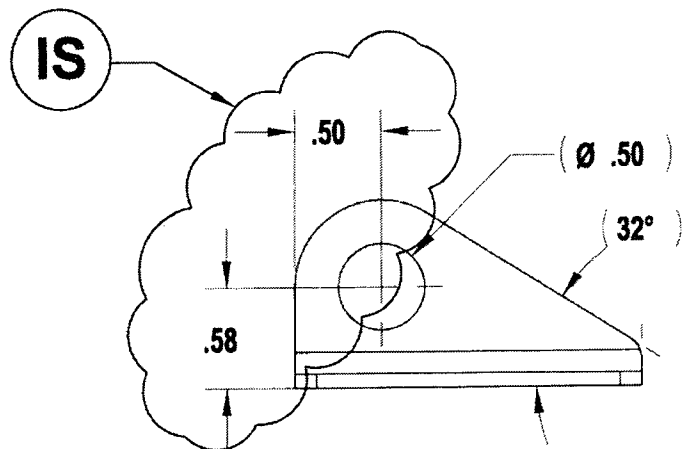
F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL	SPECIFICATION
DOCUMENTS EFFECTED:					CHANGE CATEGORY	
<input type="checkbox"/> RFMS <input type="checkbox"/> MDL <input type="checkbox"/> INSTALL INSTRU <input type="checkbox"/> ICA <input type="checkbox"/> BOM					<input type="checkbox"/> MAJOR <input checked="" type="checkbox"/> MINOR	
					DER REVIEW REQUIRED	
					<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	

108036

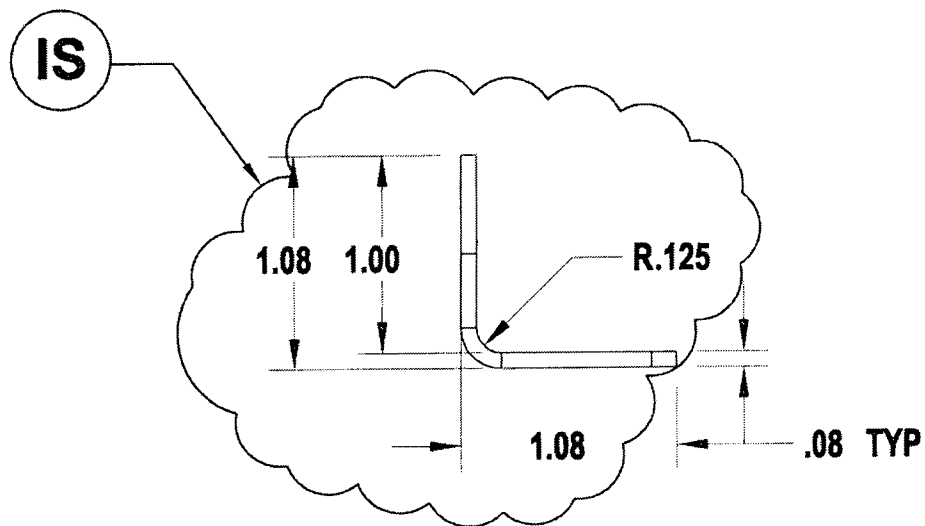
APICAL INDUSTRIES, INC.

ENGINEERING CHANGE ORDER NO. 03702

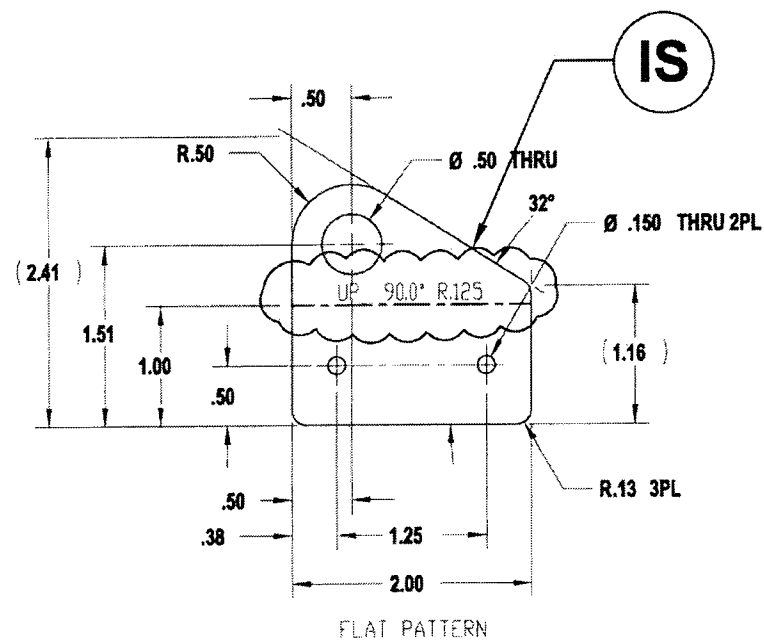
SHEET 2 OF 2



**SHEET 7, ZONE C4 IS:**



**SHEET 7, ZONE D1 IS:**



**SHEET 7, ZONE B7 IS:**

F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL/SPECIFICATION
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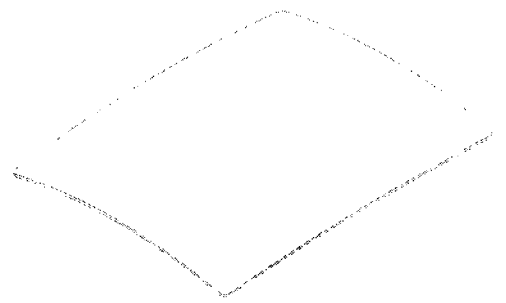
108036

THE INFORMATION CONTAINED ON THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES AND REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

REV	DESCRIPTION	DATE	APPROVED
1	UNINCORPORATED ECN(S)	03/20/02	PP

NOTES:

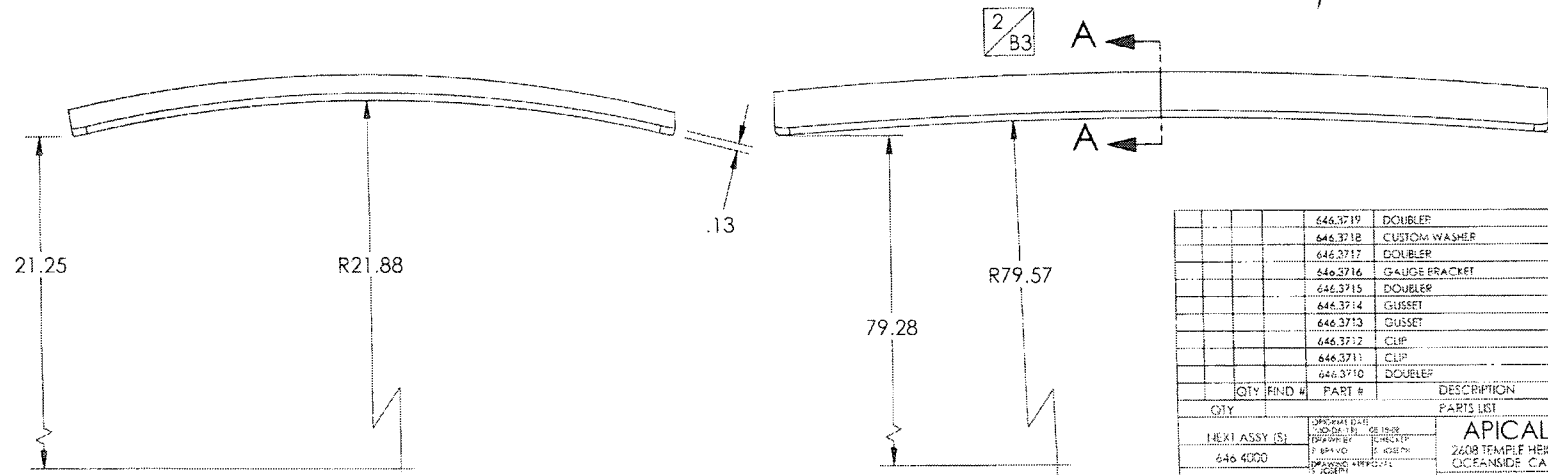
- 1 MATERIAL: ALUMINUM 6061-T6 PER AMS-QQ-A-250/11
- 2 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK; CARDINAL 4860-50 PRETREATMENT PRIMER IAW MIL-P-23377J TYPE I CLASS N
- 3 MATERIAL: 17-4 PH AMS 5604, CONDITION H900
- 4 FINISH: PRIME IAW MIL-P-23377J TYPE I CLASS N
5. DEBURR AND BREAK ALL SHARP EDGES
6. IDENTIFY IAW MPP-120



646.3710

UNINCORPORATED ECN(S)

03702

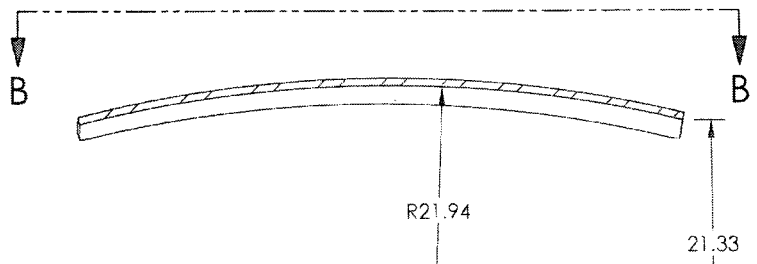


		646.3719	DOUBLER			△	△
		646.3718	CUSTOM WASHER			△	△
		646.3717	DOUBLER			△	△
		646.3716	GAUGE BRACKET			△	△
		646.3715	DOUBLER			△	△
		646.3714	GUSSET			△	△
		646.3713	GUSSET			△	△
		646.3712	CLIP			△	△
		646.3711	CLIP			△	△
		646.3710	DOUBLER			△	△
	QTY	FIND #	PART #	DESCRIPTION		MAT.	SPEC.
QTY				PARTS LIST			
NEXT ASSY (S)				APICAL INDUSTRIES			
646.4000				2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA 92056-3512 (760) 724-5300			
APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA 92056-3512 (760) 724-5300				SHEETMETAL			
				SET		SCALE	646.3700
				B		07M26	646.3700
				SCALE		NONE	SHEET 1 OF 9

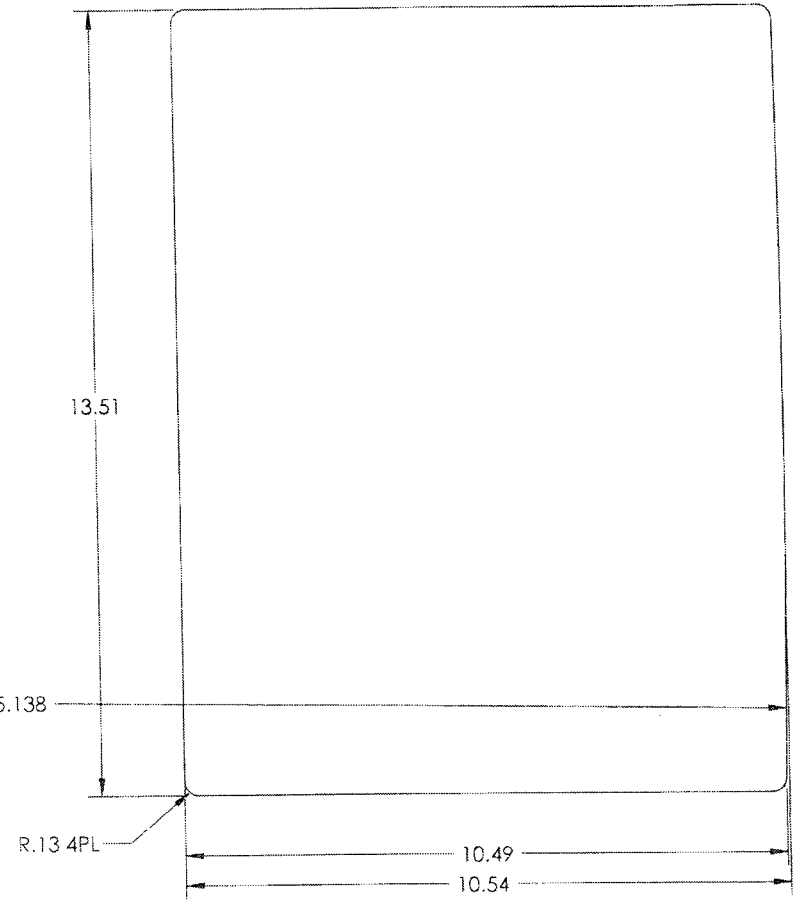


108036

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SECTION A-A  
1  
C6



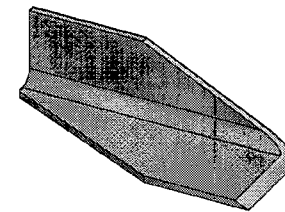
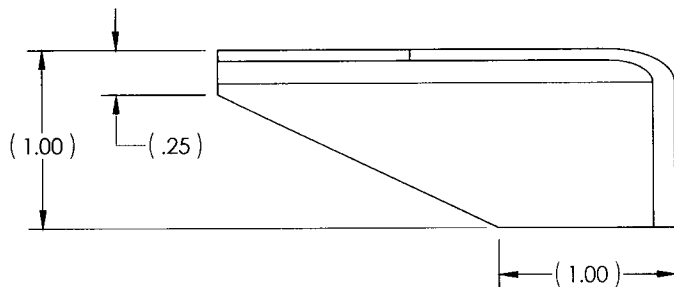
SECTION B-B

ORIGINAL DATE 1/20/14 - R. GRIFFIN	APICAL INDUSTRIES		
DRAWN BY P. BRADY	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA 92056-3512 (760) 724-5300		
TRANSMIT APPROVAL J. GRIFFIN	SHEETMETAL		
DESIGNED BY P. BRADY	SIN. EXH. CODE	QND. NO.	REV.
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE FRACTIONS DECIMALS ANGLES	8 07M16	646.3700	A
	SCALE NONE		SHEET 2 OF 9

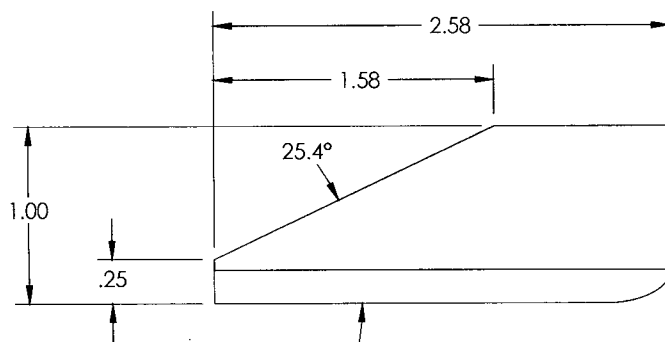
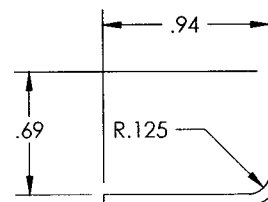
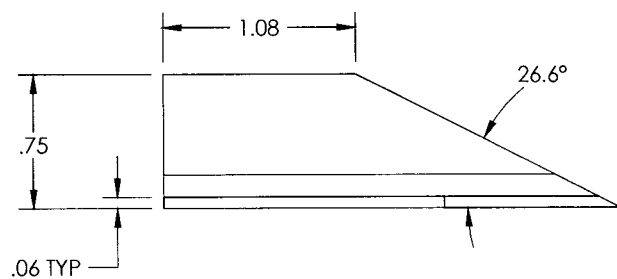
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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



646.3711 SHOWN  
646.3712 OPPOSITE



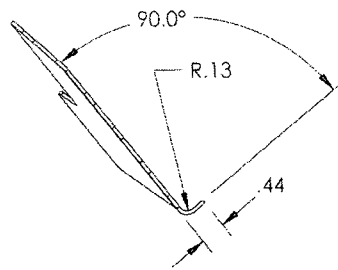
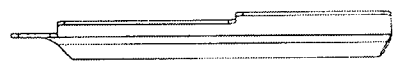
NEXT ASSY. (S)	ORIGINAL DATE	08-18-08	<b>APICAL INDUSTRIES</b> 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300 <b>SHEETMETAL</b>	
	DRAWN BY	CHECKER		
	P. BRAVO	S. JOSEPH		
	DRAWING APPROVAL	DATE		
	08-18-08		SIZE CAGE CODE DWG. NO. REV. B 07MZ6 646.3700 A	
	CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES ARE: 1 PLACE DECIMALS ±.01 2 PLACE DECIMALS ±.005 ANGLES ±.5°			SCALE: NONE SHEET 3 OF 9	



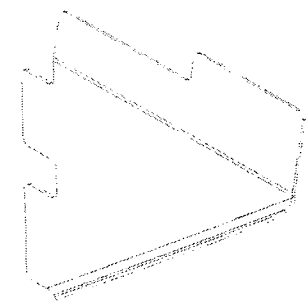
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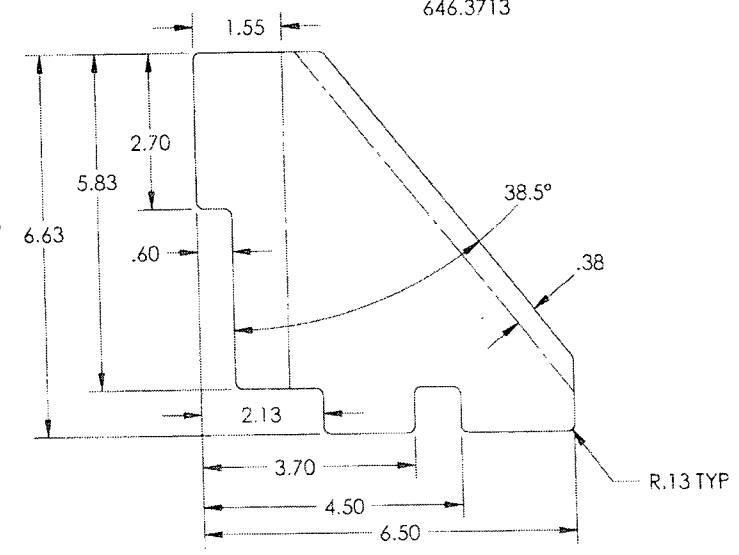
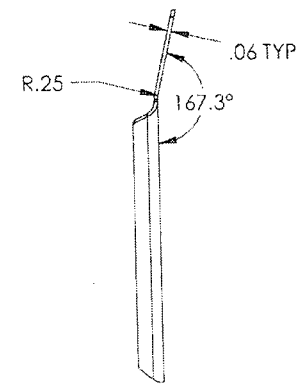
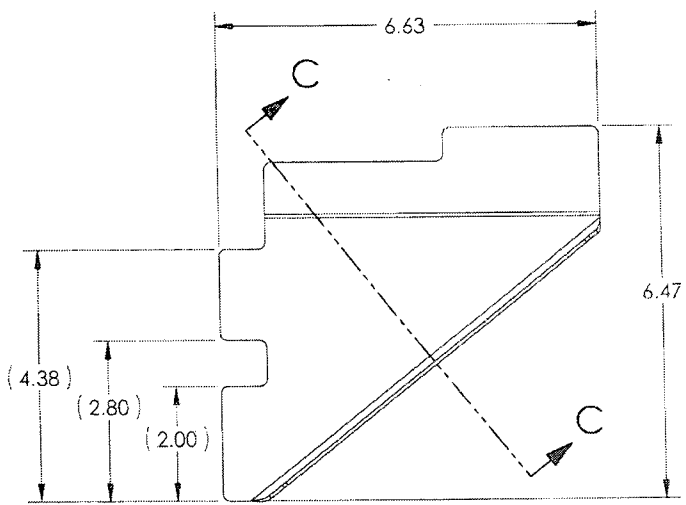
REV.	DESCRIPTION	DATE	APPROVED



SECTION C-C



646.3713



FLAT PATTERN

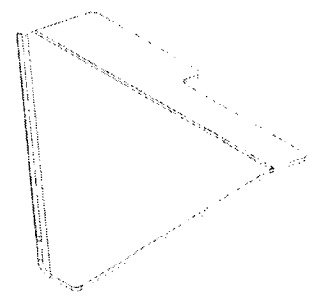
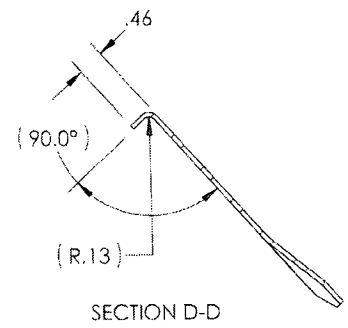
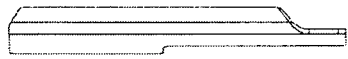
NEXT ASSY (S)	CONTRACT NO.	646-3713	APICAL INDUSTRIES 2606 TEMPLE HEIGHTS DR. OCEANSIDE, CA 92056-3512 (760) 724-5300
	DATE	10/10/02	
	DESIGNED BY	J. HENNING	
	CHECKED BY	J. HENNING	
	CONTRACT CTG	24 18 18	
MATERIAL SPECIFICATIONS	SHEETMETAL		
	SHEETMETAL		
	SHEETMETAL		
	SHEETMETAL		
	SHEETMETAL		
SCALE: 1:1	SHEET 4 OF 9		



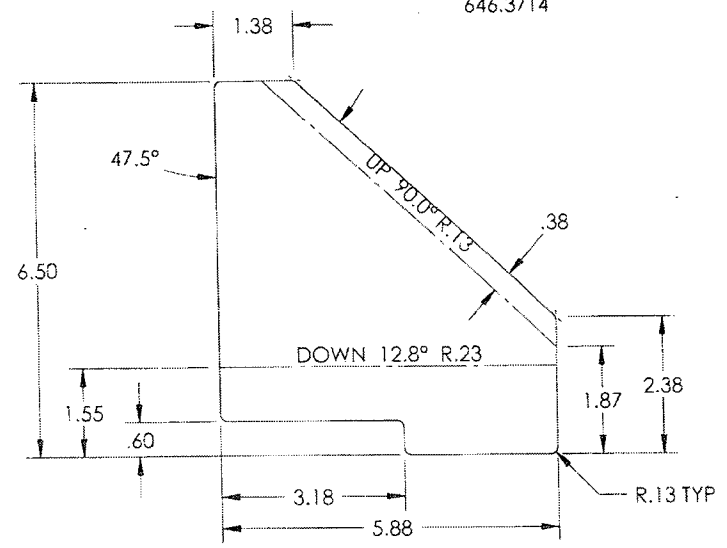
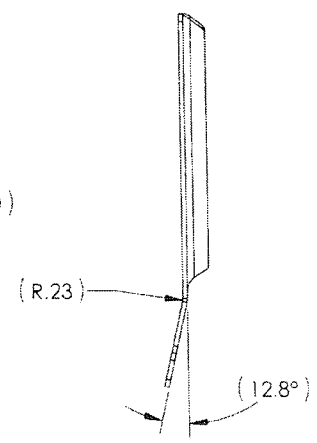
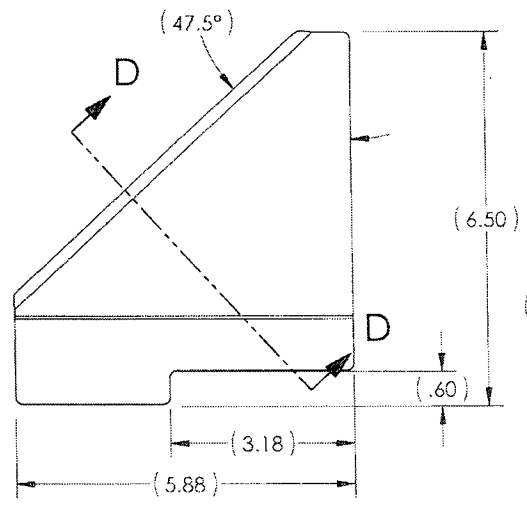
108036

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REV	DESCRIPTION	DATE	APPROVED



646.3714



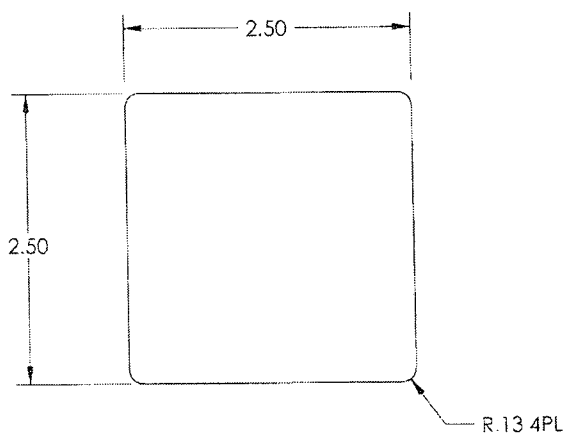
ORGANIZATION LOCATION DESIGNED BY DRAWN BY CHECKED BY DATE	<b>APICAL INDUSTRIES</b> 2609 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300  <b>SHEETMETAL</b>  SCALE: NONE
PART NAME QUANTITY PRICE PER UNIT TOTAL PRICE DATE	646.3700 507426 SHEET 5 OF 9



108036

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REVISION		DATE	APPROVED
REV	DESCRIPTION		



646.3715

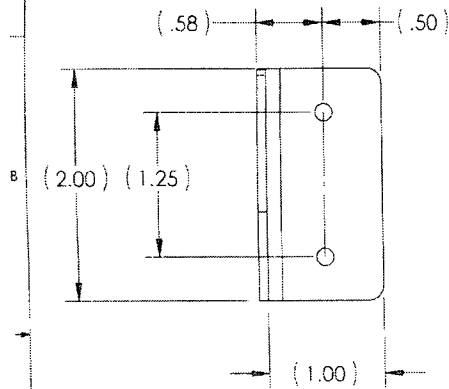
NEXT ASSY. (S)	DATE: 06-08	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR OCEANSIDE, CA. 92056-3512 (760)724-5300	
	DESIGNED BY: CHICCEP		
	DRAWN BY: J. COOPER	SHEETMETAL	
	CHECKED BY: J. COOPER		
UNITS: DIMENSIONS SPECIFIED IN INCHES AND FRACTIONS DIMENSIONS ARE TO CENTERLINE UNLESS OTHERWISE SPECIFIED TOLERANCES: .005		REF: 07MM6	REV: A
SCALE: 1:1		SHEET 1 OF 1	



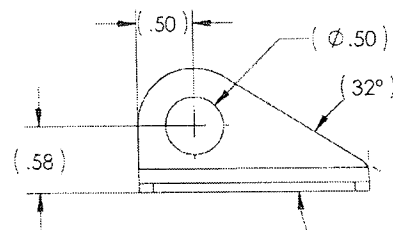
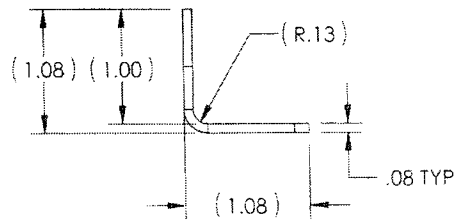
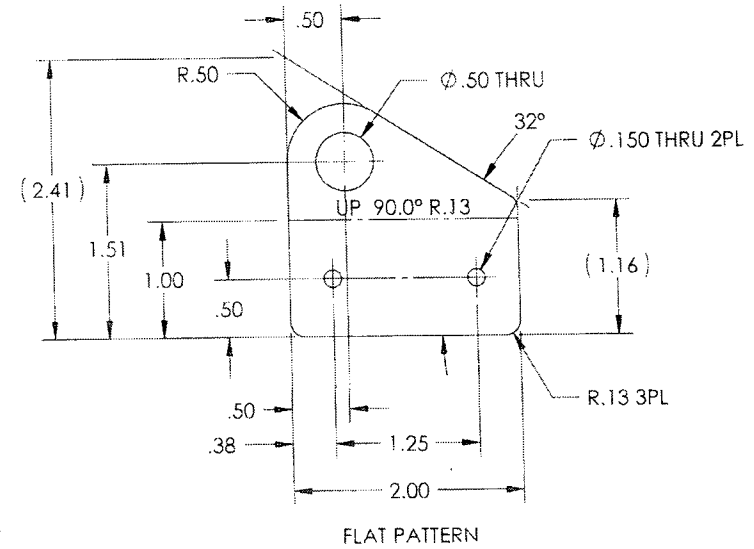
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REV	DESCRIPTION	DATE	APPROVED



646.3716



NEXT ASSY (S)	DESIGNED BY	DATE	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300	
	DESIGNED BY	DATE		
DRAWN BY	DATE	DATE	SHEETMETAL	
	DATE	DATE		
CHECKED BY	DATE	DATE	646.3700	
	DATE	DATE		
DATE	DATE	DATE	SCALE: 1:1	
	DATE	DATE		
DATE	DATE	DATE	SHEET 2 OF 2	
	DATE	DATE		

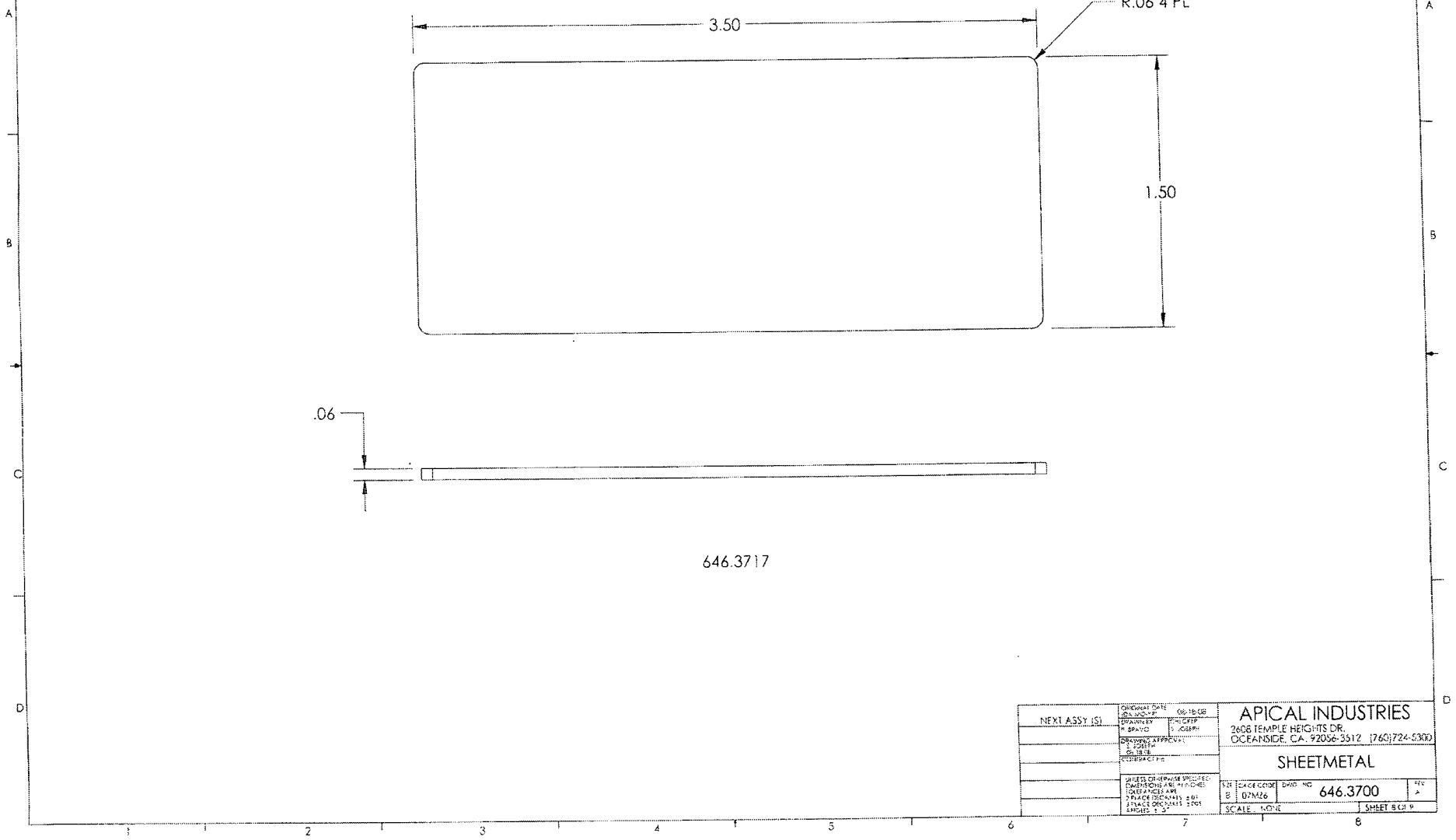




108036

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REVISION			
REV	DESCRIPTION	DATE	APPROVED



NEXT ASSY (S)	ORIGINAL DATE	06-18-08		<b>APICAL INDUSTRIES</b> 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300 <b>SHEETMETAL</b>
	DRAWN BY	J. JOSEPH		
	DESIGNED BY	J. JOSEPH		
	DATE	06-18-08		
	CHECKED BY			
	DATE			
NOTES OR REVISIONS (SPECIFICATIONS ARE PROVIDED)		TR   SCALE CODE	DATE NO	REV
		B   07M26	646.3700	A
		SCALE: NONE		SHEET 8 OF 9

4

7

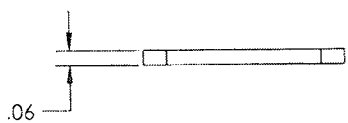
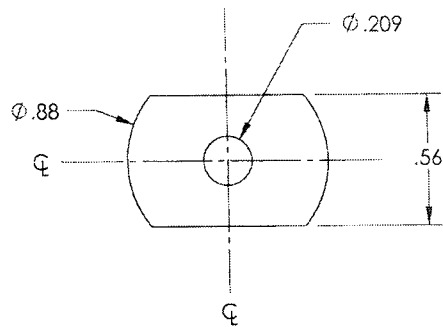
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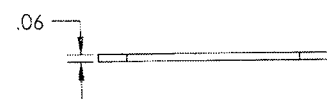
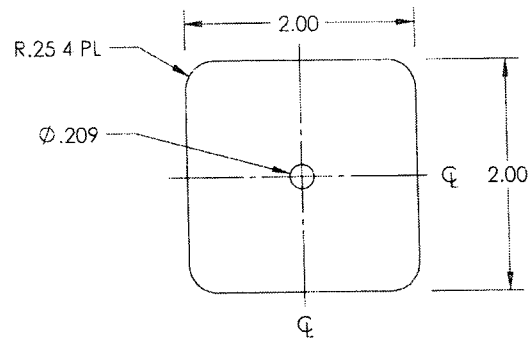
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REV	DESCRIPTION	DATE	APPROVED



646.3718



646.3719

NEXT ASSY IS:	DESIGNED BY	CS 18/28	<b>APICAL INDUSTRIES</b> 2408 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300
	DRAWN BY	CS 18/28	
	CHECKED BY	CS 18/28	
	DATE	07/12/06	
UNLESS OTHERWISE SPECIFIED	DRAWING CODE	DWG NO	<b>SHEETMETAL</b>  <b>646.3700</b> SCALE: NONE
	DATE	07/12/06	
	PRICE	07/12/06	
	PRICE	07/12/06	
SHEET 9 OF 9			



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO23102

Purchase Order Date 2/21/2014

PO Print Date 3/7/2014

Page Number 2 of 5

**Order From :**

VC-ATG001

**Ship To :** DART AEROSPACE LTD

A.T.G. INDUSTRIES INC.  
731 INDUSTRIELLE ROAD  
ROCKLAND, ON K4K 1T2  
CANADA

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

**Contact Name**

**Vendor Phone**

613-446-4544

**Ship To Contact**

**Ship To Phone**

**Ship Via:**

VENDOR'S TRUCK

**Ship Acct:**

**Buyer**

Chantal Lavoie

**Customer POID**

**Customer Tax #**

10127-2607

**Terms**

Net 30

**Currency**

CAD

**FOB**

FCA - (Free Carrier)

**Line Total:** \$37.50

4	108094	646.3718 CUSTOM WASHER	3/7/2014	10.00	\$3.95	\$39.50
---	--------	------------------------	----------	-------	--------	---------

Yes

3/7/2014

SAME AS ABOVE

**Line Total:** \$39.50

5	112879	646.3719 DOUBLER	3/7/2014	4.00	\$6.25	\$25.00
---	--------	------------------	----------	------	--------	---------

Yes

3/7/2014

SAME AS ABOVE

**Line Total:** \$25.00

6	108036	646.3719 DOUBLER	3/7/2014	4.00	\$6.25	\$25.00
---	--------	------------------	----------	------	--------	---------

Yes

3/7/2014

SAME AS ABOVE

**Line Total:** \$25.00

**Note:**

3/7/2014



A.T.G. Industries Inc.  
731, rue Industrielle Rd.  
PLATING DEPARTMENT  
Rockland, On K4K 1T2  
Canada  
Ph: (613) 446-4544  
Fax: (613) 446-4556

### Pack List

Number: 62920

Date: 07-Mar-14

#### To

DART AEROSPACE LTD  
1270 ABERDEEN ST.  
HAWKESBURY, ON K6A 1K7  
Canada

#### Ship To


DART AEROSPACE LTD  
1270 ABERDEEN ST.  
HAWKESBURY, ON K6A 1K7  
Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Terms		Ship Via	
Quantity		Description	
1 lot	Part: ASST Rev:		
10 PCS 646.3715 (6.25) 6 PCS 646.3717 (6.25) 10 PCS 646.3718 (3.95) 18 PCS 646.3719 (6.25) 4 1 PC 646.3811 (6.25) 30 PCS 649.5211 (6.75) 22 PCS 649.5213 (6.45)  HARD ANODIZE BLACK MIL-A-8625 TYPE III CLASS 2 PRIME MIL-P-23377J TYPE I CLASS N  PRICE IS PER PIECE Job: 20140148 PO: 23102 Line:			
Certificate of Conformance  A.T.G. Industries certifies that all items in this shipment are in conformance with all requirements, specifications and drawings referenced in the purchase order.  ISO 9001 : 2008 REGISTERED ATG SALES-2010 TERMS APPLY  DATE: 7/3/14  CERTIFIED SIGNATURE:   RECEIVER SIGNATURE: _____			